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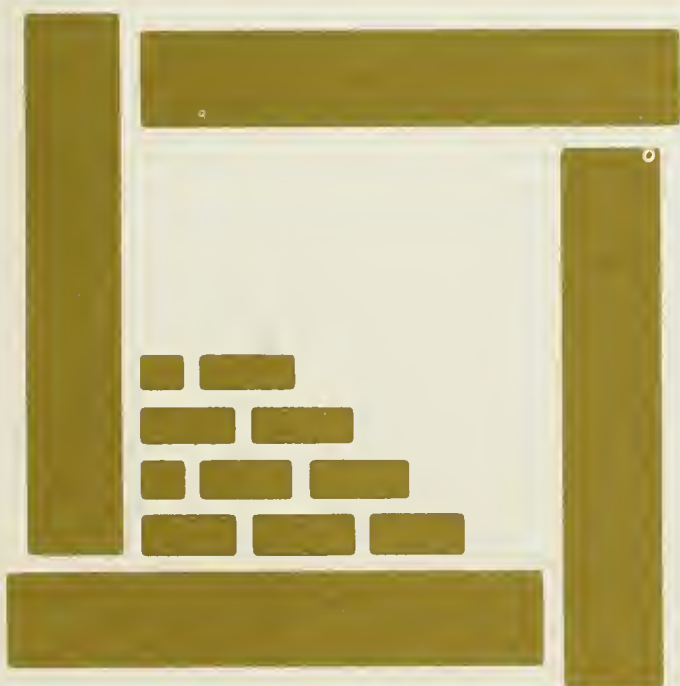
Census of Construction Industries

CC82-I-12

INDUSTRY SERIES

Electrical Work Special Trade Contractors

Industry 1731



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The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.



FINAL REPORT
INDUSTRY SERIES

1982 Census of Construction Industries

CC82-I-1 to 28
Changed October 1986

CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series CC82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



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General Instructions

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1982 Census of Construction Industries

no. 12
c. 4

CC82-I-12

INDUSTRY SERIES

Electrical Work Special Trade Contractors

Industry 1731

Issued August 1984



U.S. Department of Commerce
Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

BUREAU OF THE CENSUS
John G. Keane,
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CONSTRUCTION DIVISION

Leonora M. Gross, Chief

ACKNOWLEDGMENTS—Many persons participated in the various activities of the 1982 Census of Construction Industries. Primary direction of the program was performed by Shirley Kallek, Associate Director for Economic Fields (until May 1983), Charles A. Waite, her successor, and Michael G. Farrell, Assistant Director for Economic and Agriculture Censuses (until August 1984), and John H. Berry, his successor.

This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

The computer processing system was developed and coordinated under the direction of Barbara M. Walter. Richard W. Swartz made significant contributions to the planning and development of the computer programs, and Herbert S. Isham was responsible for the implementation of those programs. The computer programs were also developed and written by John Sibley, Clifford Jordan, Linda M. Mersch, Adele Cerrelli, and Dan G. Sansbury. Mary D. Brady was responsible for most of the data preparation specifications and procedures. Matthew R. Golas was responsible for the coordination with the Computer Services Division. Johnnye Pringle was responsible for production control of the computer processing. Under the direction of Jesse Pollock, Edward K. Ricketts and Dennis K. Duke developed the sampling plans, some computer processing specifications, and quality control procedures.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, W. Joel Richardson, Chief.

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Publication planning, design, editorial review, composition, and printing procurement were performed in the Publications Services Division, Raymond J. Koski, Chief.

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ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications¹ (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

CENSUS OF CONSTRUCTION INDUSTRIES — SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

Employer Firms

Developing the sampling frame for employer firms—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

Nonemployer Firms

General—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ‡ Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

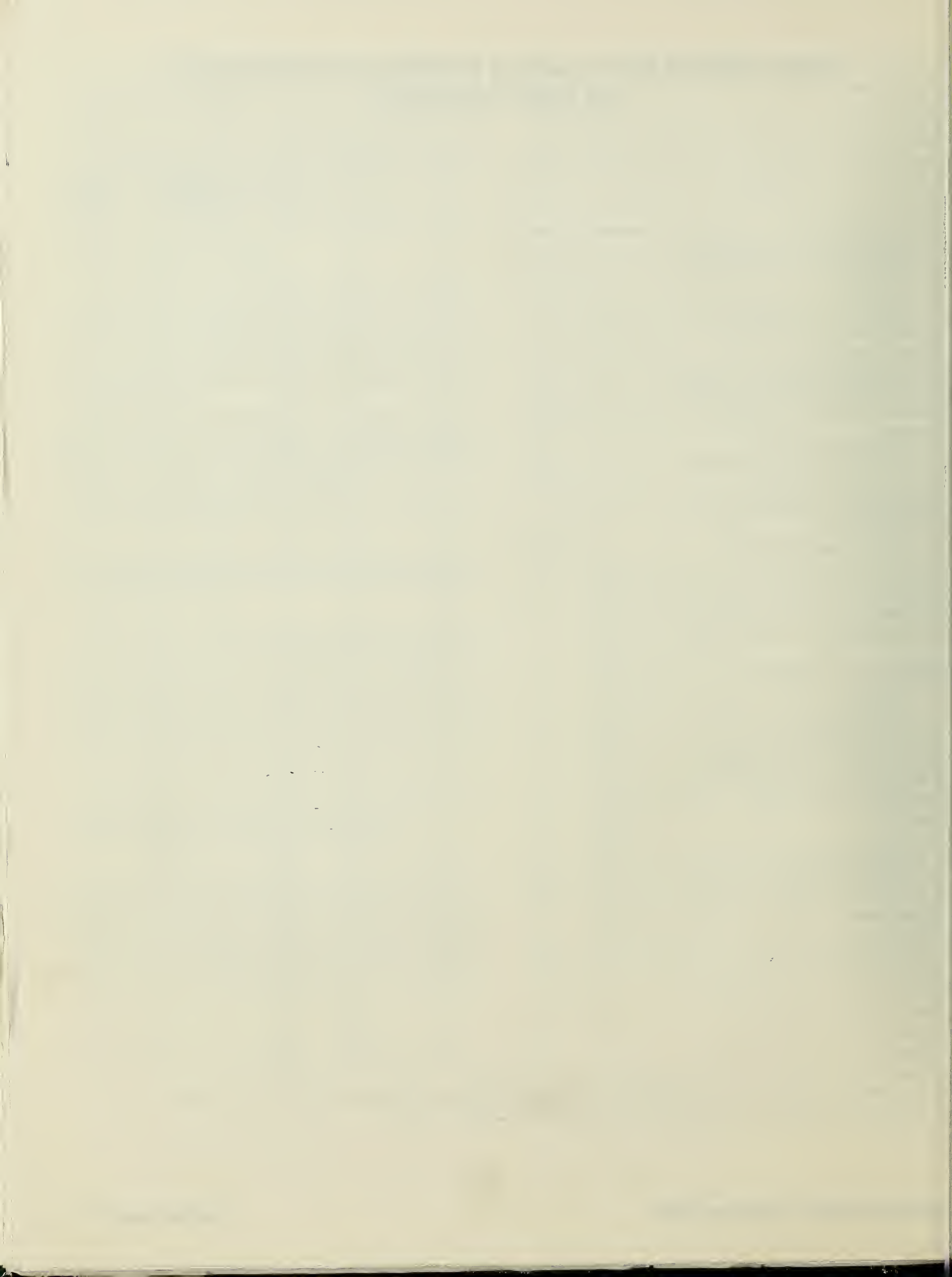
Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction ¹	By speciali- zation in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—structures, machinery and equipment	3					
Depreciation charges during the year— structures, machinery and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New structures—machinery and equipment	3					
Used structures—machinery and equipment	3					
Communication services, payments for	2					
Employees:						
All employees—average number	1, 2	1	5	6		8
Construction workers—average number	1, 2, 9					
Other employees—March	2					
Employer costs for fringe benefits—legally required and voluntary expenditures	2					
Establishments:						
Number in business at end of year	2					
Number in business during the year	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total	1, 2, 9	1, 9	5	6		
Quarterly	2, 9	9				
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll:						
First quarter, all employees	2					
Annual:						
All employees	1, 2	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—payments for	2					
Profile of the industry—selected industry averages	12					
Proprietors and working partners	2					
Ratios, State	13	13				
Receipts:						
All business receipts	2		5	6	11	
Construction receipts, total	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others	2					
Other business receipts and land receipts ²	2					
Net construction receipts	1, 2	1	5	6		8
Value added	1, 2	1	5	6		8
Rental payments:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For structures	2					
Repairs to structures and related facilities	2					
Repairs to machinery and equipment	2					
Storage capacity for fuels ³	2					
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

²Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

³Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.



Electrical Work Special Trade Contractors

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Statistics for Establishments With Payroll

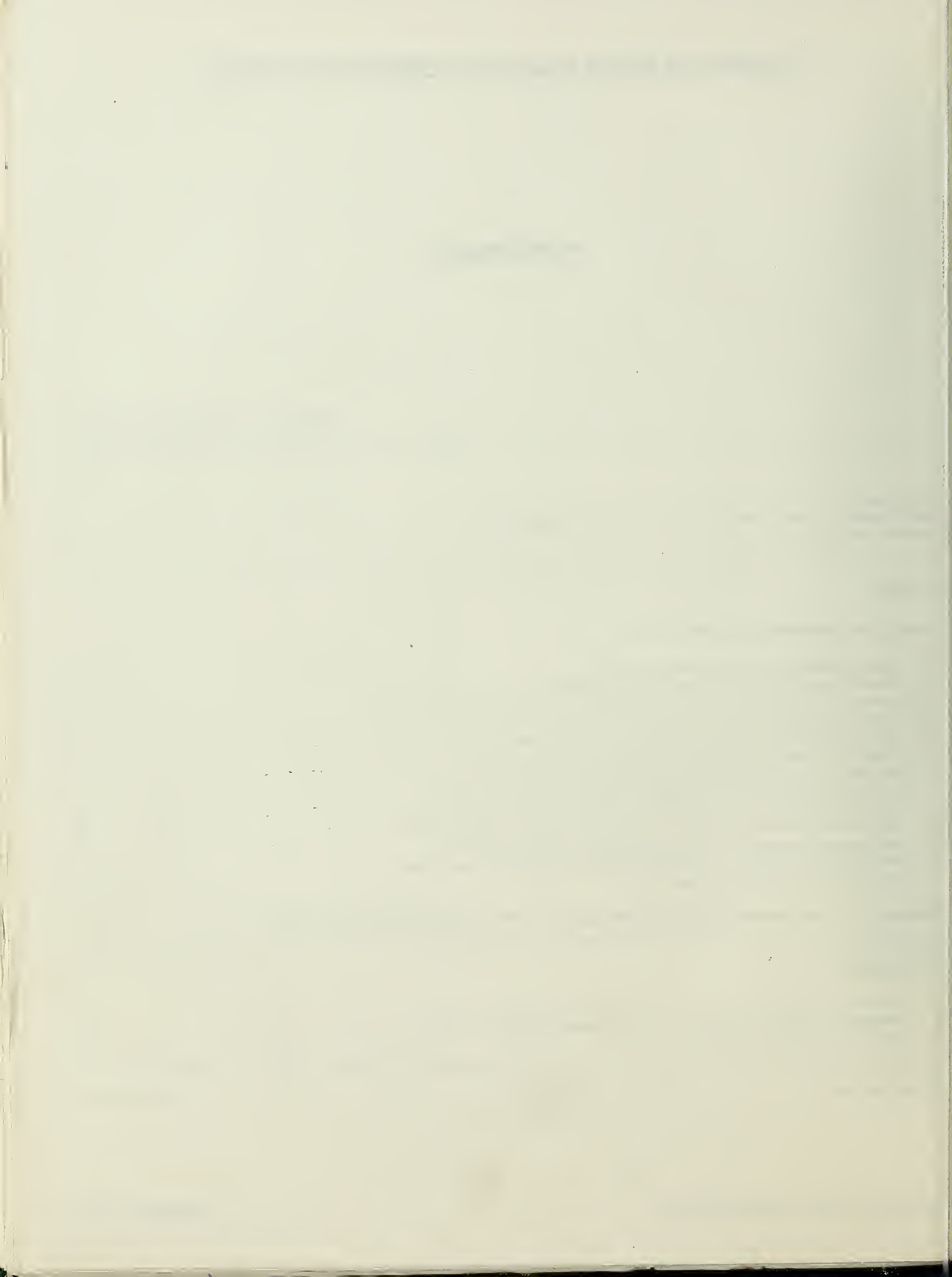
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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in electrical work at the construction site. This industry also includes electric heating contractors and establishments engaged in the installation of intercommunication equipment, sound equipment, burglar alarms, fire alarms, and telephones. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.¹

During 1982, there were 39,563 establishments with payroll classified in this industry.² All business receipts of these establishments amounted to \$26.4 billion, of which \$25.9 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$696 million, leaving net construction receipts of about \$25.2 billion. Value added for 1982 was \$15.1 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$11.3 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$387 million were also made for selected power, fuels, and

lubricants purchased during the year from other companies or received from other establishments of the parent company.

Establishments with 10 employees or more, while representing only 22.3 percent of the total number of employer establishments in this industry, accounted for 78.9 percent of all business receipts.

Total average employment in the industry showed an increase of 22 percent from 1977 to a total of 434.7 thousand employees. Total payroll for 1982 amounted to \$9.1 billion. Hours worked by construction workers during the first quarter of 1982 were 585.2 million hours, while hours worked during the third quarter were 150.3 million hours.

Payments of \$1,619 billion for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 16,500 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

²Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1982							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States	39 563	434 764	351 894	9 106 563	7 346 536	585 226	25 948 527	25 252 434
Alabama	450	4 487	3 613	64 179	51 421	6 321	204 512	200 644
Alaska	192	3 452	2 712	96 316	81 471	3 782	234 373	228 490
Arizona	641	5 913	4 877	107 028	87 005	8 574	340 408	331 277
Arkansas	321	2 261	1 797	34 716	26 290	3 058	106 798	104 078
California	4 361	45 261	35 492	1 141 105	908 418	54 803	3 347 408	3 221 707
Colorado	755	8 929	7 184	201 100	163 456	12 782	666 409	651 989
Connecticut	678	5 452	4 340	116 822	94 638	7 330	344 373	339 277
Delaware	134	1 256	1 065	25 570	22 149	1 700	61 302	60 286
District of Columbia	31	846	614	19 438	13 924	1 066	48 420	48 022
Florida	2 320	25 689	21 056	432 411	343 029	36 771	1 267 293	1 241 265
Georgia	830	11 688	9 855	216 829	179 809	18 026	620 470	591 960
Hawaii	197	1 297	1 047	32 190	25 250	1 771	112 311	109 001
Idaho	202	933	726	16 267	12 909	1 081	53 770	52 869
Illinois	1 569	20 347	16 427	548 840	443 030	28 107	1 342 311	1 297 403
Indiana	753	7 596	6 099	167 835	138 574	10 079	454 062	440 772
Iowa	562	3 157	2 494	59 957	46 917	4 215	169 638	165 795
Kansas	425	2 819	2 109	57 600	41 826	3 690	162 332	155 004
Kentucky	489	3 789	2 996	65 374	50 340	4 918	179 450	173 359
Louisiana	886	12 384	10 309	268 876	217 142	18 277	726 187	703 774
Maine	234	1 181	967	18 160	14 774	1 789	61 356	60 263
Maryland	724	9 450	7 688	181 862	148 846	13 935	569 596	559 672
Massachusetts	1 231	10 052	8 249	209 302	169 280	14 223	625 759	608 191
Michigan	1 293	10 717	8 574	242 149	193 259	13 044	736 879	716 612
Minnesota	966	7 381	5 751	168 944	134 427	9 658	472 901	466 080
Mississippi	296	1 974	1 537	31 133	24 221	2 627	84 181	81 851
Missouri	588	8 971	7 351	220 031	180 752	12 908	607 165	594 633
Montana	190	964	703	17 849	14 409	1 060	53 639	52 693
Nebraska	401	3 912	3 293	105 739	93 417	6 769	212 797	205 437
Nevada	177	1 812	1 486	45 992	38 363	2 097	128 972	125 493
New Hampshire	269	2 177	1 748	42 392	34 663	4 201	124 303	122 109
New Jersey	1 548	14 081	11 170	301 428	246 613	18 902	904 331	878 486
New Mexico	354	2 752	2 236	50 985	40 981	3 691	135 494	128 466
New York	2 600	45 891	37 351	808 367	665 239	47 272	2 386 264	2 348 879
North Carolina	1 142	11 175	9 439	157 756	125 606	16 135	530 616	505 637
North Dakota	214	1 511	1 219	25 286	20 268	1 956	84 859	82 965
Ohio	1 296	13 140	10 476	303 190	235 437	17 353	799 768	776 131
Oklahoma	620	5 778	4 813	103 453	81 144	8 093	298 240	291 768
Oregon	471	3 167	2 415	77 138	59 118	3 471	224 167	218 068
Pennsylvania	1 457	16 609	12 817	376 467	302 037	21 700	1 114 402	1 084 993
Rhode Island	227	1 547	1 192	29 796	22 360	2 009	83 924	82 019
South Carolina	456	10 555	9 490	233 746	213 048	19 973	428 660	412 347
South Dakota	174	778	621	9 312	6 812	932	28 875	28 420
Tennessee	547	7 419	6 157	144 154	115 712	10 562	441 819	432 623
Texas	2 866	41 027	33 949	820 507	658 307	59 465	2 415 998	2 372 730
Utah	294	2 855	2 382	57 915	46 439	4 198	180 750	174 546
Vermont	147	749	624	11 967	9 201	1 161	34 524	34 083
Virginia	894	9 746	7 999	174 518	139 934	13 941	483 407	468 146
Washington	776	9 251	6 804	251 357	192 218	11 255	696 125	680 337
West Virginia	245	2 342	1 954	49 563	42 538	3 619	108 262	106 345
Wisconsin	868	6 537	5 268	131 681	104 280	8 597	354 985	344 301
Wyoming	182	1 687	1 340	31 952	25 216	2 255	93 666	91 123

1982—Con.						1977			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
15 122 619	10 622 374	696 092	238 416	358 780	3 500 176	356 591	14 221 277	8 748 490	(W)	(W)	(W)	U.S.
106 264	99 138	3 867	1 610	2 334	34 983	5 397	169 186	101 367	5	4	7	Ala.
152 915	80 237	5 883	3 231	5 888	32 382	2 154	139 647	113 534	2	3	5	Alaska
173 422	161 032	9 131	5 334	5 596	51 666	3 640	152 274	91 544	8	2	7	Ariz.
56 067	49 276	2 720	1 145	1 623	21 300	2 303	77 518	40 360	7	6	9	Ark.
1 985 527	1 303 723	125 701	39 874	42 408	425 813	32 939	1 606 896	990 840	1	(W)	1	Calif.
351 632	303 806	14 420	6 889	8 162	66 721	6 160	266 900	152 188	2	1	4	Colo.
195 638	145 244	5 096	1 663	3 926	48 346	3 651	132 769	75 903	3	3	3	Conn.
39 698	20 768	1 016	504	539	8 489	1 210	42 369	28 486	11	9	16	Del.
27 165	22 275	398	619	312	5 055	1 328	64 026	39 110	4	4	(W)	D.C.
699 835	557 023	26 028	12 808	20 968	169 959	18 191	615 518	346 658	1	1	2	Fla.
375 395	228 956	28 510	8 455	8 913	70 117	8 654	285 231	165 891	2	2	4	Ga.
71 723	41 042	3 309	1 421	1 736	16 677	1 687	85 420	50 293	5	3	3	Hawaii
30 707	23 757	900	534	556	12 158	1 555	57 834	32 567	9	9	12	Idaho
863 287	461 503	44 908	9 083	14 467	170 473	20 052	852 765	560 732	1	(W)	2	Ill.
279 690	171 992	13 290	4 210	6 958	80 784	9 234	355 643	230 352	2	1	3	Ind.
98 819	72 651	3 843	1 645	2 531	34 097	4 086	168 950	100 389	4	4	6	Iowa
96 150	64 702	7 328	1 323	2 297	26 621	4 095	146 116	93 462	5	4	7	Kans.
106 162	74 541	6 091	1 149	2 940	31 099	3 869	145 002	81 545	4	4	10	Ky.
423 237	285 348	22 412	6 260	17 786	99 394	10 097	377 648	240 922	3	1	6	La.
32 279	28 480	1 093	502	1 229	9 944	1 272	41 137	22 508	10	10	16	Maine
299 747	273 093	9 924	3 189	5 975	76 546	9 013	325 523	210 071	2	1	3	Md.
375 889	249 444	17 567	3 556	8 787	64 791	7 470	293 572	167 609	2	1	3	Mass.
441 214	300 870	20 266	7 813	8 626	105 430	12 020	496 947	310 091	2	1	4	Mich.
279 502	196 653	6 821	3 693	4 840	60 401	8 047	337 043	210 310	2	1	6	Minn.
46 226	40 487	2 330	936	2 392	16 039	2 006	69 278	36 319	7	6	10	Miss.
353 381	273 638	12 531	6 101	6 357	56 768	7 498	288 680	185 991	1	1	3	Mo.
31 860	23 277	946	455	1 225	14 473	1 165	50 447	29 023	12	9	24	Mont.
123 228	84 177	7 360	4 217	8 161	68 429	4 208	242 617	166 851	3	3	1	Nebr.
79 131	48 071	3 479	1 408	1 747	14 787	1 410	77 272	43 802	5	3	5	Nev.
67 442	56 492	2 194	539	994	45 850	912	34 572	16 826	4	3	12	N.H.
517 706	369 926	25 845	6 406	9 730	120 273	9 510	390 875	248 417	2	1	4	N.J.
62 797	68 986	7 028	1 151	3 825	24 313	2 369	82 364	45 015	5	5	12	N. Mex.
1 437 244	946 488	37 385	12 206	22 188	298 047	24 219	1 037 085	676 893	1	(W)	3	N.Y.
245 053	269 879	24 979	3 012	7 832	73 362	11 224	330 236	180 300	2	2	5	N.C.
44 741	40 223	1 893	816	1 205	17 822	1 203	50 035	29 218	10	10	15	N. Dak.
475 749	322 412	23 637	7 514	7 743	101 327	13 968	595 561	363 524	1	1	3	Ohio
175 874	124 960	6 472	2 608	7 328	45 650	4 404	152 206	84 683	4	3	7	Okla.
131 156	89 744	6 099	3 079	2 235	36 058	4 345	191 447	117 135	4	3	7	Oreg.
603 550	495 829	29 408	9 368	11 500	151 408	16 204	652 093	412 718	1	1	3	Pa.
50 679	32 349	1 905	644	618	9 342	1 244	48 781	28 237	8	5	10	R.I.
293 880	121 795	16 313	3 223	7 249	34 634	6 770	184 439	116 870	1	1	4	S.C.
14 487	14 489	455	229	607	6 040	960	34 254	20 847	16	13	16	S. Dak.
235 822	204 907	9 196	2 970	6 131	59 304	7 620	268 486	160 191	2	1	4	Tenn.
1 398 533	1 013 670	43 268	25 800	44 671	302 192	28 389	1 052 188	639 241	1	(W)	1	Tex.
91 966	84 913	6 204	2 261	2 775	25 180	2 107	86 867	56 522	5	3	8	Utah
18 141	16 944	441	334	683	5 658	570	17 676	9 297	12	11	13	Vt.
281 132	197 551	15 261	5 949	7 355	69 025	8 993	306 496	175 053	2	2	3	Va.
444 937	244 827	15 788	5 949	6 853	81 101	7 738	352 056	212 946	3	1	2	Wash.
70 150	37 185	1 917	640	1 576	23 111	1 993	70 514	44 102	6	5	10	W. Va.
210 843	144 358	10 684	2 392	4 299	58 024	6 320	275 535	166 562	6	2	4	Wis.
54 928	39 222	2 542	1 682	2 087	18 694	1 119	43 294	25 187	5	5	9	Wyo.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year	39 563	36 764	32 455	26 841	1	1	2	2
Number of establishments in business at end of year	38 619	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Proprietors and working partners	11 792	18 574	17 728	18 059	2	2	3	3
All employees**	434 764	356 591	323 748	264 960	(W)	(W)	1	1
Construction workers:								
March	345 368	277 202	250 956	211 445	(W)	(W)	1	1
May	348 303	291 843	260 852	218 823	(W)	(W)	1	1
August	356 276	309 833	284 762	236 780	(W)	(W)	1	1
November	342 666	308 046	277 080	226 091	1	(W)	1	1
Average	351 894	296 946	271 441	225 668	(W)	(W)	1	1
Other employees:								
March	82 748	58 138	51 332	38 530	1	1	1	1
Construction worker hours (thousands):								
January to March	142 204	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
April to June	147 077	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
July to September	150 301	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
October to December	145 642	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Total hours worked	585 226	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
Payroll, all employees	9 106 563	5 482 519	3 792 682	2 220 961	(W)	(W)	1	1
Payroll, construction workers	7 346 536	4 496 695	3 151 047	1 866 480	(W)	(W)	1	1
Payroll, other employees	1 760 027	985 825	641 635	354 878	(W)	(W)	1	1
First quarter payroll, all employees	2 164 750	1 220 111	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Employer costs for fringe benefits	1 619 494	1 094 744	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Legally required expenditures	1 241 780	501 993	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Voluntary expenditures	377 714	592 751	(NA)	(NA)	(W)	(W)	(NA)	(NA)
All business receipts	26 441 085	14 481 842	9 608 035	5 999 559	(W)	(W)	1	1
Total construction receipts	25 948 527	14 221 277	9 448 881	5 891 241	(W)	(W)	1	1
Receipts for work subcontracted in from others	10 822 978	6 928 640	3 933 188	2 389 772	1	(W)	1	1
Land receipts ¹	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	492 558	260 565	159 154	108 514	1	2	2	2
Net construction receipts†	25 252 434	13 919 122	9 229 369	5 769 450	(W)	(W)	1	1
Value added††	15 122 619	8 748 490	5 796 631	3 449 512	(W)	(W)	1	1
Selected payments	11 318 466	5 733 353	3 811 404	2 549 658	(W)	(W)	1	1
Materials, components, and supplies ²	10 234 565	5 239 950	3 591 892	2 428 363	(W)	(W)	1	1
Construction work subcontracted to others	696 092	302 156	219 512	121 973	1	2	3	4
Selected power, fuels, and lubricants	387 808	191 247	(NA)	(NA)	1	1	(NA)	(NA)
Electricity	56 613	27 989	(NA)	(NA)	1	1	(NA)	(NA)
Natural gas	13 679	8 881	(NA)	(NA)	2	3	(NA)	(NA)
Gasoline and diesel fuel (including gasohol)	294 679	140 452	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	22 836	13 926	(NA)	(NA)	2	2	(NA)	(NA)
Storage capacity for fuels ³ (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures	238 416	104 368	(NA)	(NA)	1	1	(NA)	(NA)
For machinery and equipment	133 087	59 322	38 028	15 202	1	1	3	2
For structures	105 329	45 046	(NA)	(NA)	1	1	(NA)	(NA)
Selected purchased services	271 747	177 895	(NA)	(NA)	1	3	(NA)	(NA)
Communication services	119 242	74 206	(NA)	(NA)	1	2	(NA)	(NA)
Repairs to structures and related facilities	23 866	14 250	(NA)	(NA)	1	2	(NA)	(NA)
Repairs to machinery and equipment	128 638	89 439	(NA)	(NA)	1	5	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts	25 948 527	14 221 277	9 448 881	5 891 241	(W)	(W)	1	1
Government owned	3 743 799	2 525 096	2 494 828	(NA)	1	(W)	1	(NA)
Privately owned	22 204 727	11 696 182	6 954 053	(NA)	(W)	(W)	1	(NA)

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders, and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.

³Data were collected only for establishments classified as heavy construction contractors.

**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll:
1982 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets -----	3 253 896	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	358 780	258 962	126 739	70 720	1	1	2	2
New -----	276 746	211 858	103 652	58 680	1	1	2	2
Used -----	82 033	47 104	23 087	12 016	2	3	3	4
Retirements and disposition of depreciable assets -----	112 500	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	3 500 176	1 539 921	860 171	(NA)	1	1	1	(NA)
Depreciation charges during year -----	481 416	166 108	99 412	(NA)	1	1	3	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets -----	546 701	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	55 009	35 657	25 571	16 693	2	4	5	5
New structures and related facilities -----	40 387	25 197	18 568	11 353	2	3	4	4
Used structures and related facilities -----	14 622	10 460	7 003	5 340	3	6	6	6
Retirements and disposition of depreciable assets -----	12 348	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	589 363	390 302	227 675	(NA)	1	1	2	(NA)
Depreciation charges during year -----	90 696	21 872	15 026	(NA)	1	2	6	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets -----	2 707 214	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	303 770	223 306	101 168	54 002	1	2	3	2
New machinery and equipment, including automobiles and trucks -----	236 359	186 662	85 084	47 327	1	1	2	1
New automobiles and trucks, intended primarily for highway use -----	133 077	125 190	(NA)	(NA)	2	1	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks -----	67 411	36 644	16 084	6 675	2	3	4	3
Retirements and disposition of depreciable assets -----	100 151	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	2 910 833	1 149 619	632 496	(NA)	1	1	2	(NA)
Depreciation charges during year -----	390 719	144 237	84 386	(NA)	1	1	3	(NA)

Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	39 563	1
Total construction receipts	25 948 527	(W)
Establishments with inventories:		
Number	19 951	2
Total construction receipts	17 271 796	(W)
Inventories ¹ :		
End of 1982, total	635 573	1
Value for establishments with LIFO reserve	23 162	4
Amount of LIFO reserve	8 456	6
Value for establishments with no LIFO reserve	612 411	1
End of 1981, total	616 386	1
Value for establishments with LIFO reserve	25 556	4
Amount of LIFO reserve	9 592	8
Value for establishments with no LIFO reserve	590 830	1
Establishments with no inventories:		
Number	19 612	1
Total construction receipts	8 676 731	(W)

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1982										
Number of establishments -----	39 563	22 800	7 927	4 942	2 707	715	336	86	35	15
All employees** -----	434 764	46 771	52 462	66 214	79 453	49 280	51 889	28 174	23 217	37 303
Payroll, all employees -----	9 106 563	561 889	826 855	1 236 901	1 735 816	1 246 251	1 376 692	798 715	660 611	662 833
Construction worker hours (thousands) -----	585 226	56 133	63 319	83 285	108 031	71 297	76 831	46 535	39 065	40 726
All business receipts -----	26 441 085	2 278 062	2 509 369	3 597 082	4 806 010	3 453 912	3 539 681	2 303 366	1 992 519	1 961 083
Total construction receipts -----	25 948 527	2 242 850	2 460 674	3 520 472	4 682 394	3 360 482	3 487 329	2 264 339	1 975 617	1 954 368
Net construction receipts† -----	25 252 434	2 187 817	2 399 632	3 426 583	4 535 022	3 258 960	3 384 112	2 200 294	1 927 736	1 932 277
Value added†† -----	15 122 619	1 255 776	1 423 146	2 038 528	2 782 422	2 078 111	2 115 109	1 286 127	<u>2 143 397</u>	(D)
Payments for materials, components, supplies, and fuels -----	10 622 374	967 253	1 025 180	1 464 665	1 876 215	1 274 278	1 321 354	953 193	<u>1 740 233</u>	(D)
Payments for construction work subcontracted to others -----	696 092	55 033	61 042	93 889	147 372	101 522	103 217	64 045	47 881	22 091
Rental payments for machinery, equipment, and structures -----	238 416	22 237	29 777	38 630	45 781	33 212	31 816	17 052	11 452	8 458
Capital expenditures, other than land -----	358 780	42 016	48 999	66 524	70 476	42 532	50 216	15 402	8 653	13 960
End-of-year gross book value of depreciable assets -----	3 500 176	491 217	475 636	560 557	662 965	384 648	383 938	159 945	148 305	232 963
1977										
All employees** -----	356 591	43 935	47 842	60 329	70 242	39 643	32 274	31 059	<u>31 268</u>	(D)
Total construction receipts -----	14 221 277	1 555 824	1 621 978	2 270 496	2 987 064	1 804 624	1 476 508	1 380 247	<u>1 124 538</u>	(D)
Value added†† -----	8 748 490	853 338	933 713	1 323 057	1 741 810	1 079 756	905 662	915 947	<u>995 207</u>	(D)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(W)	1	2	2	1	(W)	(W)	(W)	(W)	(W)
Net construction receipts† -----	(W)	1	2	1	(W)	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land -----	1	4	5	4	1	(W)	(W)	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1982											
Number of establishments -----	39 563	4 185	2 948	6 890	11 188	6 151	3 840	2 735	886	428	310
All employees** -----	434 764	4 852	4 948	14 679	43 695	45 601	51 652	68 132	45 837	41 447	113 919
Payroll, all employees -----	9 106 563	14 026	31 528	135 148	551 343	723 186	941 613	1 484 553	1 148 620	1 081 049	2 995 495
Construction worker hours (thousands) -----	585 226	4 143	5 285	15 706	51 293	55 489	66 455	91 903	66 756	57 792	170 398
All business receipts -----	26 441 085	43 873	109 500	507 517	1 796 422	2 172 636	2 700 874	4 171 584	3 073 205	2 904 781	8 960 691
Total construction receipts -----	25 948 527	43 791	108 785	504 183	1 771 331	2 127 257	2 644 990	4 079 292	3 010 406	2 826 428	8 832 062
Net construction receipts† -----	25 252 434	42 045	106 477	495 621	1 735 230	2 079 202	2 577 518	3 963 762	2 919 559	2 722 072	8 610 947
Value added†† -----	15 122 619	23 727	59 812	278 572	998 752	1 222 977	1 522 271	2 417 833	1 826 624	1 755 108	5 016 940
Payments for materials, components, supplies, and fuels -----	10 622 374	18 400	47 379	220 382	761 569	901 603	1 111 132	1 638 220	1 155 733	1 045 316	3 722 636
Payments for construction work subcontracted to others -----	696 092	1 745	2 308	8 562	36 100	48 055	67 471	115 530	90 847	104 356	221 115
Rental payments for machinery, equipment, and structures -----	238 416	549	1 048	5 492	20 091	23 560	28 740	43 333	28 727	27 078	59 795
Capital expenditures, other than land -----	358 780	430	2 195	9 077	35 710	42 677	52 430	65 208	43 464	36 083	71 505
End-of-year gross book value of depreciable assets -----	3 500 176	18 299	35 538	128 048	400 026	394 401	433 235	596 774	381 701	315 652	796 499
1977											
All employees** -----	356 591	5 967	7 772	18 601	47 539	45 206	47 851	58 434	36 466	188 755	(NA)
Total construction receipts -----	14 221 277	51 555	173 309	543 208	1 571 470	1 593 255	1 893 896	2 617 282	1 735 684	14 041 620	(NA)
Value added†† -----	8 748 490	27 564	95 404	306 027	878 993	913 355	1 101 731	1 543 388	1 049 891	12 832 139	(NA)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(W)	3	9	3	2	2	2	1	(W)	(W)	(W)
Net construction receipts† -----	(W)	3	4	2	2	2	2	1	(W)	(W)	(W)
Capital expenditures, other than land -----	1	16	12	7	5	5	5	1	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts			Relative standard error of estimate (percent) for column—		
	Total	New construction ¹	Maintenance and repair	A	B	C
	A	B	C	A	B	C
1982						
Total construction receipts†	25 948 527	19 511 108	6 437 418	(W)	(W)	(W)
Building construction	20 036 446	14 888 918	5 147 530	(W)	(W)	(W)
Single-family houses	1 969 004	1 300 378	668 626	1	2	1
Single-family houses, detached	1 583 161	1 013 421	569 740	1	2	2
Single-family houses, attached	385 842	286 957	98 885	2	3	3
Apartment buildings with two or more apartments	981 790	774 460	207 329	1	1	3
Other residential buildings	535 583	414 842	120 740	1	1	2
Office and bank buildings	6 860 103	5 428 898	1 431 205	(W)	(W)	1
Office buildings	6 296 093	5 055 461	1 240 631	(W)	(W)	1
Bank buildings and other financial institutions	564 009	373 436	190 573	1	1	1
Industrial buildings and warehouses	5 076 330	3 591 037	1 485 293	(W)	(W)	1
Industrial buildings	4 489 743	3 153 415	1 336 327	1	1	1
Warehouses	586 586	437 621	148 965	1	1	2
Stores, restaurants, public garages, and automobile service stations	1 815 706	1 238 341	577 365	1	1	1
Religious buildings	213 367	141 659	71 708	3	3	2
Educational buildings	783 475	594 745	188 730	1	1	2
Hospitals and institutional buildings	1 300 702	1 038 299	262 402	1	1	1
Amusement, social, and recreational buildings	209 420	169 671	39 748	2	2	2
Other nonresidential buildings	290 962	196 581	94 379	2	2	5
Nonbuilding construction	4 262 932	3 361 885	901 047	(W)	(W)	1
Highways, streets, and related facilities	547 636	425 980	121 655	1	2	2
Power and communication transmission lines, towers, and related facilities	1 325 773	1 106 352	219 420	1	1	2
Sewage treatment and water treatment plants	355 375	309 952	45 423	1	1	4
Sewage treatment plants	238 071	212 653	25 418	1	1	3
Water treatment plants	117 304	97 299	20 004	2	2	9
Blast furnaces, petroleum refineries, and chemical complexes	412 419	284 320	128 098	(W)	(W)	1
Power plants	973 930	816 147	157 783	(W)	(W)	1
Power plants, nuclear	538 586	469 820	68 766	(W)	(W)	(W)
Power plants, except nuclear	435 344	346 326	89 017	1	1	1
Other nonbuilding construction	647 787	419 120	228 667	4	3	7
Construction work, n.s.k.	1 649 149	1 260 305	388 841	2	2	2
1977						
Total construction receipts†	14 221 277	11 042 587	3 178 690	(W)	(W)	(W)
Building construction	10 496 389	7 943 402	2 552 987	(W)	(W)	1
Single-family houses	1 708 588	1 267 688	440 900	1	1	2
Apartment buildings with two or more apartments	718 227	578 873	139 354	1	1	2
Other residential buildings	269 233	203 191	66 042	1	1	2
Office and bank buildings	1 385 703	1 060 944	324 759	1	1	1
Industrial buildings and warehouses	3 183 315	2 300 591	882 724	1	1	1
Stores, restaurants, public garages, and automobile service stations	957 283	676 151	281 132	1	1	2
Religious buildings	159 535	117 526	42 009	2	2	3
Educational buildings	809 538	670 318	139 220	1	1	2
Hospitals and institutional buildings	959 928	821 495	138 433	(W)	(W)	1
Amusement, social, and recreational buildings	137 048	103 998	33 050	2	3	3
Other nonresidential buildings	207 991	142 627	65 364	4	4	6
Nonbuilding construction	2 834 576	2 341 808	492 768	(W)	(W)	1
Highways, streets, and related facilities	307 529	254 737	52 792	1	2	1
Power and communication transmission lines, towers, and related facilities	1 170 283	938 242	232 041	1	1	1
Sewage treatment and water treatment plants	262 525	247 015	15 510	1	1	3
Blast furnaces, petroleum refineries, and chemical complexes	207 697	155 214	52 483	1	1	3
Power plants	381 323	360 442	20 881	(W)	(W)	1
Power plants, nuclear	110 462	105 450	5 012	(W)	(W)	(W)
Power plants, except nuclear	270 861	254 992	15 869	(W)	(W)	1
Other nonbuilding construction	505 219	386 158	119 061	5	6	8
Construction work, n.s.k.	890 595	756 537	134 058	2	2	2

¹For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments -----	39 563	434 764	9 106 563	25 948 527	13 553 109	25 252 434	15 122 619	696 092	(W)	(W)	1
Establishments not specializing by type -----	14 341	172 239	3 745 867	10 040 375	(NA)	9 743 426	5 993 733	296 949	1	(W)	2
Establishments specializing 51 percent or more -----	25 221	262 525	5 360 696	15 908 151	13 553 109	15 509 008	9 128 885	399 142	1	(W)	1
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	7 370	27 364	340 421	1 082 810	856 025	1 067 041	615 983	15 769	2	2	9
Establishments with—											
100 percent specialization -----	1 879	5 090	56 645	197 662	197 662	194 323	107 435	3 339	5	5	16
90 to 99 percent specialization -----	1 070	4 151	48 876	159 219	147 584	157 235	96 436	*1 984	6	6	45
80 to 89 percent specialization -----	1 098	4 853	63 568	190 601	156 170	188 695	114 397	1 905	6	5	17
70 to 79 percent specialization -----	1 514	6 060	78 425	246 318	180 274	243 008	139 688	3 310	5	4	14
60 to 69 percent specialization -----	1 319	5 293	69 430	218 670	135 427	214 173	121 778	4 497	6	6	16
51 to 59 percent specialization -----	487	1 914	23 475	70 339	38 905	69 605	36 248	734	7	8	30
SINGLE-FAMILY HOUSES, ATTACHED											
All establishments specializing in type -----	578	2 656	36 211	110 254	82 214	105 464	59 641	4 789	7	6	9
Establishments with—											
100 percent specialization -----	211	559	6 969	23 037	23 037	22 741	11 463	296	13	14	24
90 to 99 percent specialization -----	36	235	2 632	7 513	6 966	7 372	4 260	141	11	10	(W)
80 to 89 percent specialization -----	45	302	3 190	9 062	7 338	8 972	4 897	*90	23	22	61
70 to 79 percent specialization -----	88	452	5 645	17 791	13 196	16 763	9 992	1 028	19	18	26
60 to 69 percent specialization -----	149	818	13 294	39 250	24 269	36 333	22 359	2 917	9	8	11
51 to 59 percent specialization -----	48	289	4 480	13 599	7 406	13 282	6 669	*317	15	16	63
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type -----	850	9 077	160 099	481 618	355 341	472 197	274 406	9 421	3	3	5
Establishments with—											
100 percent specialization -----	187	1 350	23 485	68 169	68 169	67 272	37 387	897	10	10	11
90 to 99 percent specialization -----	83	786	12 142	36 055	33 373	35 488	21 180	567	9	12	31
80 to 89 percent specialization -----	120	1 336	23 340	69 615	57 339	67 959	40 017	1 656	7	6	10
70 to 79 percent specialization -----	197	2 411	37 754	122 326	89 772	119 799	69 376	2 527	4	4	10
60 to 69 percent specialization -----	174	1 587	27 711	83 783	51 516	81 658	43 055	2 125	6	9	13
51 to 59 percent specialization -----	88	1 606	35 667	101 668	55 470	100 020	63 389	1 648	4	3	3
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type -----	137	2 084	45 884	137 599	100 613	135 716	81 932	1 883	5	3	4
Establishments with—											
100 percent specialization -----	32	357	7 185	20 627	20 627	(D)	13 452	(D)	15	11	-
90 to 99 percent specialization -----	18	150	2 823	8 334	7 565	(D)	7 486	(D)	13	17	-
80 to 89 percent specialization -----	19	199	6 269	18 838	15 206	18 597	11 104	241	12	5	1
70 to 79 percent specialization -----	12	263	5 853	26 002	18 807	25 159	12 153	843	9	4	3
60 to 69 percent specialization -----	37	856	16 829	46 203	28 877	45 795	26 762	408	7	5	17
51 to 59 percent specialization -----	19	258	6 924	17 594	9 529	17 380	10 973	214	12	5	2
BANK BUILDINGS AND OTHER FINANCIAL INSTITUTIONS											
All establishments specializing in type -----	121	826	20 028	57 589	42 101	56 657	38 209	931	8	8	11
Establishments with—											
100 percent specialization -----	*11	*26	*46	*256	*256	*256	*123	-	67	68	-
90 to 99 percent specialization -----	23	153	3 275	10 817	10 131	10 482	6 642	335	15	13	30
80 to 89 percent specialization -----	21	125	2 513	9 602	7 689	9 472	5 886	130	25	33	24
70 to 79 percent specialization -----	26	220	6 427	16 727	12 153	16 590	12 381	137	11	13	33
60 to 69 percent specialization -----	13	193	4 508	12 137	7 359	(D)	7 034	(D)	10	8	-
51 to 59 percent specialization -----	26	109	3 258	8 049	4 511	(D)	6 142	(D)	29	25	-
WAREHOUSES											
All establishments specializing in type -----	172	1 205	21 018	65 487	48 609	64 165	38 571	1 322	8	8	17
Establishments with—											
100 percent specialization -----	49	284	5 331	16 578	16 578	16 408	9 428	*170	19	19	46
90 to 99 percent specialization -----	24	112	*1 515	*4 800	*4 595	*4 800	*3 175	-	40	42	-
80 to 89 percent specialization -----	16	111	1 892	6 877	5 511	6 419	3 712	458	20	15	38
70 to 79 percent specialization -----	*10	66	1 189	*3 449	2 462	3 332	1 715	117	34	41	38
60 to 69 percent specialization -----	39	292	4 420	14 366	8 735	14 036	8 338	330	19	18	27
51 to 59 percent specialization -----	33	340	6 671	19 417	10 726	19 170	12 202	247	21	15	18
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	3 618	54 044	1 236 194	3 100 417	2 412 100	2 996 502	1 954 240	103 915	1	1	2
Establishments with—											
100 percent specialization -----	1 072	13 646	316 779	751 045	751 045	730 431	465 514	20 614	2	2	11
90 to 99 percent specialization -----	431	5 651	121 465	306 694	284 368	298 801	212 452	7 893	4	3	3
80 to 89 percent specialization -----	510	7 205	161 340	403 933	332 504	390 966	263 906	12 966	2	2	2
70 to 79 percent specialization -----	652	8 296	172 552	437 620	321 202	426 749	274 327	10 871	3	2	3
60 to 69 percent specialization -----	731	12 308	305 808	802 037	501 441	782 032	503 331	20 005	2	2	3
51 to 59 percent specialization -----	220	6 936	158 249	399 087	221 537	367 522	234 708	31 564	1	1	(W)

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982—Con.

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
	A	B	C	D	E	F	G	H	B	D	H
OFFICE BUILDINGS											
All establishments specializing in type	1 272	50 948	1 349 466	4 700 934	4 193 841	4 646 037	2 340 485	54 897	1	(W)	5
Establishments with—											
100 percent specialization	270	26 824	713 212	2 975 345	2 975 345	2 954 643	1 324 176	20 702	1	(W)	12
90 to 99 percent specialization	136	2 245	54 734	152 612	141 170	149 015	91 900	3 597	8	5	28
80 to 89 percent specialization	215	4 961	130 433	360 613	293 556	351 730	223 290	8 882	3	2	2
70 to 79 percent specialization	239	6 742	177 133	489 351	359 859	480 939	267 293	8 412	2	1	2
60 to 69 percent specialization	294	5 192	127 824	353 279	219 148	345 182	208 297	8 097	3	2	6
51 to 59 percent specialization	117	4 983	146 128	369 733	204 760	364 526	225 528	5 206	1	1	1
STORES, RESTAURANTS, PUBLIC GARAGES, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	1 895	15 183	285 646	788 988	619 749	769 060	467 419	19 928	2	2	5
Establishments with—											
100 percent specialization	520	3 424	63 974	185 927	185 927	178 123	112 191	7 804	6	5	10
90 to 99 percent specialization	205	1 506	27 021	67 862	62 809	66 076	40 673	1 785	9	8	18
80 to 89 percent specialization	241	2 612	50 046	128 977	106 123	126 098	77 328	2 879	5	5	6
70 to 79 percent specialization	383	3 097	60 012	167 866	123 010	164 458	100 400	3 408	6	5	7
60 to 69 percent specialization	389	3 253	54 786	156 677	96 881	153 792	89 438	2 885	5	5	16
51 to 59 percent specialization	156	1 289	29 806	81 679	44 997	80 512	47 387	1 166	5	4	9
EDUCATIONAL BUILDINGS											
All establishments specializing in type	350	3 467	65 355	205 855	146 145	199 802	109 209	6 053	6	5	9
Establishments with—											
100 percent specialization	55	270	4 535	14 540	14 540	14 195	7 442	344	20	22	3
90 to 99 percent specialization	26	173	3 206	13 527	12 841	12 629	6 993	897	26	23	29
80 to 89 percent specialization	64	593	10 138	29 864	24 474	28 665	15 074	1 199	15	15	37
70 to 79 percent specialization	65	766	14 663	47 402	34 390	46 050	23 371	1 352	13	9	18
60 to 69 percent specialization	96	979	19 016	61 220	38 133	59 750	34 429	1 469	8	9	10
51 to 59 percent specialization	43	684	13 796	39 301	21 765	38 511	21 898	790	12	8	7
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	328	6 391	135 656	370 280	278 136	358 278	193 924	12 002	2	2	6
Establishments with—											
100 percent specialization	47	769	15 009	40 165	40 165	39 428	22 233	737	6	7	14
90 to 99 percent specialization	54	721	13 164	40 127	37 178	38 804	18 499	1 323	9	6	15
80 to 89 percent specialization	43	1 251	26 972	77 009	63 321	73 928	34 218	3 081	5	3	3
70 to 79 percent specialization	55	1 326	30 032	81 200	59 552	78 388	44 414	2 812	4	4	16
60 to 69 percent specialization	72	1 541	31 148	82 492	51 071	80 314	46 463	2 178	5	2	2
51 to 59 percent specialization	54	783	19 330	49 285	26 847	47 414	28 096	1 871	8	6	24
AMUSEMENT, SOCIAL, AND RECREATIONAL BUILDINGS											
All establishments specializing in type	42	1 415	40 320	109 785	69 632	106 548	76 221	3 237	5	3	6
Establishments with—											
100 percent specialization	*9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
90 to 99 percent specialization	*7	141	(D)	7 555	6 799	(D)	5 478	(D)	10	19	-
80 to 89 percent specialization	*11	221	4 715	13 153	11 351	12 833	8 062	320	25	24	17
70 to 79 percent specialization	*7	103	1 651	3 628	2 780	3 392	2 282	*236	31	21	73
60 to 69 percent specialization	5	288	11 303	22 870	13 868	21 833	16 934	1 037	(W)	(W)	(W)
51 to 59 percent specialization	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
HIGHWAYS, STREETS, AND RELATED FACILITIES											
All establishments specializing in type	239	14 649	109 797	349 335	302 412	333 948	204 335	15 387	1	2	2
Establishments with—											
100 percent specialization	134	2 325	46 393	173 783	173 783	164 671	96 460	9 112	4	4	3
90 to 99 percent specialization	42	490	12 497	37 749	35 453	36 690	20 448	1 059	11	8	6
80 to 89 percent specialization	21	270	7 443	22 651	19 047	21 331	11 547	1 320	12	14	2
70 to 79 percent specialization	*14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization	19	616	13 966	45 096	27 302	43 298	26 651	1 798	13	5	11
51 to 59 percent specialization	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
POWER AND COMMUNICATION TRANSMISSION LINES, TOWERS, AND RELATED FACILITIES											
All establishments specializing in type	592	14 876	329 933	1 114 060	1 066 855	1 060 186	604 370	53 873	2	1	2
Establishments with—											
100 percent specialization	520	11 972	256 147	919 834	919 834	879 560	492 840	40 274	2	1	1
90 to 99 percent specialization	16	455	11 244	32 684	29 914	(D)	19 908	(D)	10	9	-
80 to 89 percent specialization	15	1 260	33 220	85 429	71 272	82 071	40 034	3 358	2	3	16
70 to 79 percent specialization	17	204	4 169	12 889	9 153	(D)	7 512	(D)	16	11	-
60 to 69 percent specialization	11	497	10 438	29 207	17 651	27 013	18 373	2 194	4	5	14
51 to 59 percent specialization	12	488	14 715	34 016	19 028	33 573	25 701	442	5	5	6
BLAST FURNACES, PETROLEUM REFINERIES, AND CHEMICAL COMPLEXES											
All establishments specializing in type	96	5 853	169 107	316 793	255 058	307 920	231 284	8 872	1	(W)	1
Establishments with—											
100 percent specialization	27	1 067	27 206	55 717	55 717	54 451	40 426	1 265	(W)	(W)	(W)
90 to 99 percent specialization	17	1 417	47 982	67 395	62 153	65 986	49 625	1 409	(W)	1	(W)
80 to 89 percent specialization	17	1 285	35 857	68 243	55 464	66 303	53 613	1 940	1	(W)	3
70 to 79 percent specialization	9	757	23 173	44 683	33 620	42 995	32 747	1 688	(W)	(W)	(W)
60 to 69 percent specialization	18	963	25 953	60 931	37 638	58 973	41 025	1 958	(W)	(W)	(W)
51 to 59 percent specialization	7	364	8 936	19 824	10 465	19 212	13 847	612	7	4	1

See footnotes at end of table.

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982—Con.

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
POWER PLANTS, NUCLEAR											
All establishments specializing in type -----	26	7 043	226 590	464 668	413 354	451 586	369 968	13 082	(W)	(W)	(W)
Establishments with—											
100 percent specialization -----	12	4 028	124 802	286 284	286 284	281 512	218 911	4 772	(W)	(W)	(W)
90 to 99 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
80 to 89 percent specialization -----	3	177	6 091	11 368	9 662	(D)	8 379	(D)	(W)	(W)	-
70 to 79 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization -----	3	287	9 447	22 261	14 206	(D)	(D)	(D)	(W)	(W)	-
51 to 59 percent specialization -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
POWER PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type -----	53	2 367	63 620	151 187	113 554	144 172	89 023	7 015	2	1	1
Establishments with—											
100 percent specialization -----	19	562	10 753	26 928	26 928	25 373	19 303	1 555	8	7	5
90 to 99 percent specialization -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
80 to 89 percent specialization -----	*10	912	29 229	38 107	31 201	37 944	22 646	163	1	1	14
70 to 79 percent specialization -----	13	406	9 694	28 047	21 167	(D)	13 940	(D)	6	5	-
60 to 69 percent specialization -----	5	243	6 336	15 938	9 562	(D)	10 154	(D)	(W)	(W)	-
51 to 59 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
OILFIELDS											
All establishments specializing in type -----	177	3 085	71 673	197 720	171 039	190 573	131 908	7 146	2	1	1
Establishments with—											
100 percent specialization -----	97	1 719	32 487	104 277	104 277	98 694	62 941	5 583	6	5	1
90 to 99 percent specialization -----	16	128	2 902	9 241	8 607	9 152	6 384	*89	25	19	50
80 to 89 percent specialization -----	21	392	8 900	22 608	18 500	22 378	15 082	230	8	9	(W)
70 to 79 percent specialization -----	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
60 to 69 percent specialization -----	22	660	23 734	51 481	32 456	50 783	40 523	698	8	5	1
51 to 59 percent specialization -----	*2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	39 563	351 894	585 226	345 368	142 204	348 303	147 077
Alabama	450	3 613	6 321	3 379	1 443	3 484	1 532
Alaska	192	2 712	3 782	1 927	720	1 953	734
Arizona	641	4 877	8 574	4 659	2 031	4 722	2 103
Arkansas	321	1 797	3 058	1 769	740	1 676	697
California	4 361	35 492	54 803	35 423	13 775	34 939	13 920
Colorado	755	7 184	12 782	6 940	3 048	7 149	3 208
Connecticut	678	4 340	7 330	4 150	1 706	4 321	1 882
Delaware	134	1 065	1 700	959	374	1 007	413
District of Columbia	31	614	1 066	645	281	629	276
Florida	2 320	21 056	36 771	21 256	9 205	20 158	8 917
Georgia	830	9 855	18 026	10 097	4 547	9 804	4 518
Hawaii	197	1 047	1 771	1 078	463	1 050	451
Idaho	202	726	1 081	723	275	671	262
Illinois	1 569	16 427	28 107	16 061	6 873	16 623	7 186
Indiana	753	6 099	10 079	6 043	2 480	5 956	2 483
Iowa	562	2 494	4 215	2 344	1 000	2 477	1 032
Kansas	425	2 109	3 690	1 979	875	2 008	892
Kentucky	489	2 996	4 918	2 934	1 201	2 841	1 220
Louisiana	886	10 309	18 277	9 931	4 381	10 424	4 712
Maine	234	967	1 789	905	428	934	449
Maryland	724	7 688	13 935	7 682	3 483	7 742	3 540
Massachusetts	1 231	8 249	14 223	7 690	3 214	7 711	3 324
Michigan	1 293	8 574	13 044	8 400	3 180	8 662	3 352
Minnesota	966	5 751	9 658	5 733	2 371	5 870	2 581
Mississippi	296	1 537	2 627	1 463	622	1 587	689
Missouri	588	7 351	12 908	7 225	3 176	7 436	3 334
Montana	190	703	1 060	613	230	625	250
Nebraska	401	3 293	6 769	3 140	1 537	3 327	1 754
Nevada	177	1 486	2 097	1 484	532	1 507	556
New Hampshire	269	1 748	4 201	1 613	956	1 624	985
New Jersey	1 548	11 170	18 902	10 499	4 496	11 022	4 759
New Mexico	354	2 236	3 691	2 128	866	2 179	922
New York	2 600	37 351	47 272	36 534	11 191	38 130	11 819
North Carolina	1 142	9 439	16 135	9 234	3 954	9 478	4 122
North Dakota	214	1 219	1 956	1 141	464	1 103	447
Ohio	1 296	10 476	17 353	9 829	4 230	10 263	4 343
Oklahoma	620	4 813	8 093	4 527	1 882	4 761	1 994
Oregon	471	2 415	3 471	2 380	856	2 421	873
Pennsylvania	1 457	12 817	21 700	12 456	5 129	12 866	5 689
Rhode Island	227	1 192	2 009	1 150	486	1 198	512
South Carolina	456	9 490	19 973	10 347	4 880	10 244	5 574
South Dakota	174	621	932	745	301	581	207
Tennessee	547	6 157	10 562	6 214	2 567	6 149	2 682
Texas	2 866	33 949	59 465	33 499	14 474	33 213	14 765
Utah	294	2 382	4 198	2 276	1 016	2 363	1 050
Vermont	147	624	1 161	568	269	601	287
Virginia	894	7 999	13 941	7 982	3 332	7 788	3 365
Washington	776	6 804	11 255	7 372	3 143	6 649	2 824
West Virginia	245	1 954	3 619	1 985	898	1 979	891
Wisconsin	868	5 268	8 597	4 968	2 079	5 071	2 112
Wyoming	182	1 340	2 255	1 271	519	1 310	565

¹Sum of construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
356 276	150 301	342 666	145 641	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	U.S.
3 733	1 709	3 642	1 636	5	5	6	7	5	6	6	6	6	5	Ala.
3 376	1 052	3 587	1 275	3	4	3	7	6	10	3	5	2	4	Alaska
4 858	2 177	4 990	2 261	10	10	9	10	9	10	11	13	10	12	Ariz.
1 909	822	1 756	798	8	8	12	13	8	9	8	9	7	8	Ark.
35 543	13 782	34 370	13 324	1	1	1	1	1	1	1	1	1	1	Calif.
7 236	3 267	7 122	3 258	2	2	2	2	2	2	2	2	2	2	Colo.
4 406	1 907	4 236	1 833	3	3	3	4	3	4	3	4	4	4	Conn.
1 158	481	1 065	431	13	10	13	12	12	12	14	11	12	11	Del.
591	253	584	256	4	4	4	4	4	4	4	5	4	5	D.C.
21 399	9 581	20 489	9 066	1	1	1	1	1	1	1	2	2	2	Fla.
10 041	4 689	9 152	4 269	2	2	2	2	2	2	3	3	3	3	Ga.
1 032	429	968	426	5	5	5	6	5	7	5	6	5	7	Hawaii
726	278	686	264	9	9	9	11	9	12	9	13	10	14	Idaho
16 755	7 138	15 686	6 908	1	1	1	1	1	1	1	1	1	1	Ill.
6 361	2 642	5 778	2 473	2	2	2	3	2	3	2	3	2	3	Ind.
2 521	1 099	2 444	1 081	5	4	4	6	5	6	5	6	5	6	Iowa
2 155	965	2 094	956	5	5	5	7	5	6	5	6	5	7	Kans.
3 054	1 271	2 917	1 225	4	4	5	5	4	5	4	5	4	5	Ky.
10 507	4 717	10 097	4 465	3	2	2	2	4	3	3	3	2	2	La.
996	472	933	438	10	10	11	13	10	12	10	12	11	12	Maine
7 686	3 498	7 372	3 412	2	2	2	2	2	2	2	2	2	2	Md.
8 139	3 700	8 897	3 983	2	2	2	3	2	3	2	3	2	3	Mass.
8 661	3 365	8 064	3 146	2	2	2	2	2	2	2	2	2	2	Mich.
5 641	2 388	5 365	2 317	2	2	2	3	2	3	2	3	2	3	Minn.
1 570	710	1 328	604	7	7	7	8	7	9	10	11	8	9	Miss.
7 532	3 259	7 073	3 137	1	1	1	1	1	1	1	2	2	2	Mo.
720	291	742	287	9	9	10	12	8	12	9	13	9	12	Mont.
3 089	1 577	3 437	1 900	3	2	3	3	3	3	3	3	3	3	Nebr.
1 507	533	1 351	475	6	4	6	5	6	5	7	6	7	6	Nev.
1 902	1 155	1 781	1 104	4	3	5	5	4	4	5	4	4	4	N.H.
11 498	4 876	11 008	4 769	2	2	2	2	2	2	2	2	2	2	N.J.
2 299	975	2 218	927	5	5	5	6	5	7	5	7	5	7	N. Mex.
37 210	12 164	36 798	12 097	1	1	(W)	1	2	2	(W)	1	(W)	1	N.Y.
9 560	4 187	9 047	3 870	2	2	2	3	2	3	2	3	2	3	N.C.
1 230	512	1 287	531	11	11	12	12	10	12	10	12	12	13	N. Dak.
11 271	4 467	10 076	4 311	1	1	1	2	1	2	1	2	2	2	Ohio
4 627	1 990	5 104	2 226	4	4	4	4	4	5	4	4	7	8	Okla.
2 387	893	2 290	847	4	4	4	5	5	5	4	5	4	5	Oreg.
13 157	5 541	12 384	5 339	1	1	1	2	1	2	1	2	1	2	Pa.
1 223	516	1 118	493	8	9	8	10	8	11	8	10	8	11	R.I.
9 011	5 083	8 222	4 435	1	1	1	1	1	1	1	1	1	1	S.C.
561	216	526	205	18	14	24	25	18	18	19	18	20	18	S. Dak.
6 211	2 741	5 862	2 570	2	2	2	2	2	2	2	3	2	3	Tenn.
34 684	15 409	33 271	14 816	1	1	1	1	1	1	1	1	1	1	Tex.
2 444	1 091	2 366	1 040	5	5	5	6	6	7	5	6	6	7	Utah
624	297	648	306	12	12	13	16	12	14	12	14	11	14	Vt.
8 062	3 613	7 855	3 630	2	2	3	2	2	2	2	2	2	2	Va.
6 693	2 752	6 154	2 536	3	2	2	2	2	2	3	3	3	3	Wash.
1 897	933	1 865	895	6	6	7	9	7	7	6	6	6	6	W. Va.
5 376	2 193	5 266	2 212	7	7	4	5	4	5	9	10	10	11	Wis.
1 431	618	1 277	552	5	6	5	7	5	7	7	9	5	7	Wyo.

Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982					1977 construction receipts for work done in this State	Percent change 1982/ 1977 (col A ÷ F)	Relative standard error of estimate (percent) for column—		
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Construction receipts	Number	Construction receipts					
A	B	C	D	E	F	G	A	C	E	
United States -----	25 948 527	38 915	22 989 811	6 713	2 958 715	14 221 277	82.5	(W)	(W)	(W)
Alabama -----	238 734	447	160 029	138	78 705	202 836	17.7	4	6	1
Alaska -----	278 031	192	234 373	42	43 658	205 246	35.5	3	4	1
Arizona -----	356 692	629	319 289	68	37 403	153 908	131.8	2	3	1
Arkansas -----	108 065	319	89 228	97	18 836	102 438	5.5	7	8	4
California -----	3 323 356	4 333	3 250 463	130	72 892	1 544 862	115.1	1	1	11
Colorado -----	611 151	732	570 786	70	40 365	254 628	140.0	2	2	7
Connecticut -----	413 838	661	332 424	147	81 413	143 177	189.0	2	3	2
Delaware -----	93 558	128	57 197	112	36 360	40 836	129.1	7	10	5
District of Columbia -----	182 000	31	35 666	189	146 334	94 450	92.7	2	6	1
Florida -----	1 351 386	2 302	1 192 458	199	158 928	579 951	133.0	1	1	1
Georgia -----	567 871	815	506 770	288	61 101	285 477	98.9	2	3	3
Hawaii -----	121 419	197	112 304	37	9 115	88 964	36.5	4	4	11
Idaho -----	93 166	199	49 900	115	43 265	68 386	36.2	5	9	2
Illinois -----	1 333 043	1 553	1 254 447	184	78 595	860 124	55.0	1	1	2
Indiana -----	469 449	740	407 573	180	61 876	376 779	24.6	2	2	2
Iowa -----	216 050	562	150 393	111	65 656	207 869	3.9	3	4	1
Kansas -----	231 181	418	137 864	154	93 317	150 294	53.8	3	5	2
Kentucky -----	235 528	478	155 501	205	80 026	191 981	22.7	3	5	2
Louisiana -----	778 840	869	663 318	148	115 521	370 800	110.0	2	2	2
Maine -----	78 233	229	58 495	71	19 738	44 793	74.7	8	11	12
Maryland -----	430 296	709	373 310	179	56 985	258 302	66.6	2	2	2
Massachusetts -----	584 898	1 204	526 771	157	58 127	290 645	101.2	2	2	2
Michigan -----	700 892	1 274	668 994	134	31 897	495 636	41.4	1	1	1
Minnesota -----	468 616	945	430 176	64	38 440	327 159	43.2	2	2	2
Mississippi -----	164 878	295	76 237	196	88 641	100 741	63.7	3	7	2
Missouri -----	431 904	560	381 514	115	50 389	265 030	63.0	1	2	2
Montana -----	74 310	189	50 693	53	23 616	57 563	29.1	7	11	4
Nebraska -----	140 003	400	122 893	126	17 109	114 870	21.9	6	6	1
Nevada -----	174 616	177	122 658	104	51 957	82 434	111.8	3	4	4
New Hampshire -----	74 181	255	57 060	158	17 120	37 968	95.4	6	8	2
New Jersey -----	922 825	1 509	877 609	187	45 215	391 890	135.5	2	2	2
New Mexico -----	191 177	342	127 456	80	63 720	86 583	120.8	4	6	4
New York -----	2 212 374	2 544	2 156 932	183	55 442	1 008 220	119.4	1	1	1
North Carolina -----	464 057	1 103	420 082	138	43 975	297 634	55.9	2	2	2
North Dakota -----	109 597	214	74 823	44	34 774	65 858	66.4	6	9	2
Ohio -----	828 711	1 269	743 352	280	85 359	620 606	33.5	1	1	1
Oklahoma -----	407 361	615	289 217	159	118 143	170 937	138.3	2	3	3
Oregon -----	264 107	465	195 074	62	69 033	195 952	34.8	2	3	3
Pennsylvania -----	1 048 079	1 421	1 003 227	161	44 852	634 441	65.2	1	1	1
Rhode Island -----	66 285	221	61 997	71	4 288	46 179	43.5	7	7	1
South Carolina -----	291 249	448	225 194	187	66 054	137 471	111.9	3	3	3
South Dakota -----	45 414	174	27 353	44	18 061	44 002	3.2	10	12	2
Tennessee -----	370 092	533	318 221	191	51 871	244 361	51.5	2	2	2
Texas -----	2 378 878	2 817	2 264 508	203	114 369	1 028 974	131.2	1	1	1
Utah -----	155 887	292	141 830	33	14 057	85 029	83.3	4	4	4
Vermont -----	49 749	147	33 442	82	16 306	21 459	131.8	9	9	9
Virginia -----	517 821	879	338 148	233	179 672	343 647	50.7	2	3	3
Washington -----	673 825	774	630 507	101	43 317	362 956	85.6	2	2	2
West Virginia -----	139 616	243	83 418	102	56 197	95 542	46.1	5	8	8
Wisconsin -----	358 699	861	337 773	88	20 926	280 079	28.1	2	2	2
Wyoming -----	126 512	181	90 837	100	35 674	61 594	105.4	4	6	6

Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
All kinds of business.....	26 522 949	14 481 842	(W)	(W)
General building contractor	32 357	296 638	8	3
Highway and street contractor	6 149	17 638	11	3
Heavy construction contractor	113 010	31 575	6	5
Air conditioning contractor	85 654	72 488	4	3
Carpentry contractor	20 232	(NA)	7	(NA)
Concrete contractor	12 000	(NA)	8	(NA)
Drywall contractor	26 785	(NA)	3	(NA)
Electrical contractor	25 384 315	12 203 684	(W)	(W)
Elevator contractor	19 630	(NA)	9	(NA)
Heating contractor	64 834	51 120	3	4
Insulation contractor	7 331	(NA)	14	(NA)
Millwright	11 031	(NA)	8	(NA)
Plumbing contractor	63 351	47 848	4	4
Refrigeration contractor	10 319	11 050	6	12
Sheet metal contractor	15 744	12 574	3	5
Mechanical contractor	72 386	(NA)	(W)	(NA)
Engineering services for others	26 282	(NA)	3	(NA)
Manufacturing	34 981	17 544	3	2
Rental of construction machinery or equipment to others	9 467	(NA)	9	(NA)
Retail trade	93 847	128 055	3	2
Wholesale trade	34 844	38 742	1	4
Other activities	5 398	1 552 886	4	5

Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
AVERAGE PER ESTABLISHMENT				
Number of employees**	11.0	9.7	10.0	(W)
Number of construction workers	8.9	8.1	8.4	(W)
Number of all other employees	2.1	1.6	1.6	1
Payroll, all employees	\$1,000 230.2	149.1	116.9	(W)
Construction worker wages	do 185.7	122.3	97.1	(W)
Other employee salaries	do 44.5	26.8	19.8	(W)
All business receipts	do 668.3	393.9	296.0	(W)
Total construction receipts	do 655.9	386.8	291.1	(W)
Payments for materials, components, supplies, and fuels	do 268.5	147.7	110.7	(W)
Construction work subcontracted to others	do 17.6	8.2	6.8	1
Capital expenditures, other than land	do 9.1	7.0	3.9	1
Gross book value of depreciable assets	do 88.5	41.9	26.5	1
AVERAGE PER EMPLOYEE				
Payroll, all employees	do 21.0	15.4	11.7	(W)
All business receipts	do 60.8	40.6	29.7	(W)
Value added††	do 34.8	24.5	17.9	(W)
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages	do 20.9	15.1	11.6	(W)
Total construction receipts	do 73.7	47.9	34.8	(W)
Construction worker hours	thousand 1.7	(NA)	(NA)	(W)
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries	\$1,000 21.3	17.0	12.5	(W)
AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS				
Payroll, all employees .....	.351	.390	.400	(W)
Payments for materials, components, supplies, and fuels .....	.409	.380	.380	(W)
Payments for construction work subcontracted to others .....	.027	.020	.020	1
Capital expenditures, other than land .....	.014	.020	.010	1
Rental payments for machinery, equipment, and structures .....	.009	.010	(NA)	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States -----	11.0	20.9	1.7	73.7	.351	.409	.027	.014	.009
Alabama -----	10.0	14.3	1.7	56.6	.314	.485	.019	.011	.008
Alaska -----	18.0	27.9	1.4	86.4	.411	.342	.025	.025	.014
Arizona -----	9.2	18.1	1.8	69.8	.314	.473	.027	.016	.016
Arkansas -----	7.0	15.4	1.7	59.4	.325	.461	.025	.015	.011
California -----	10.4	25.2	1.5	94.3	.341	.389	.038	.013	.012
Colorado -----	11.8	22.5	1.8	92.8	.302	.456	.022	.012	.010
Connecticut -----	8.0	21.4	1.7	79.3	.339	.422	.015	.011	.005
Delaware -----	9.4	20.4	1.6	57.6	.417	.339	.017	.009	.008
District of Columbia -----	27.3	23.0	1.7	78.9	.401	.460	.008	.006	.013
Florida -----	11.1	16.8	1.7	60.2	.341	.440	.021	.017	.010
Georgia -----	14.1	18.6	1.8	63.0	.349	.369	.046	.014	.014
Hawaii -----	6.6	24.8	1.7	107.3	.287	.365	.029	.015	.013
Idaho -----	4.6	17.4	1.5	74.1	.303	.442	.017	.010	.010
Illinois -----	13.0	27.0	1.7	81.7	.409	.344	.033	.011	.007
Indiana -----	10.1	22.1	1.7	74.4	.370	.379	.029	.015	.009
Iowa -----	5.6	19.0	1.7	68.0	.353	.428	.023	.015	.010
Kansas -----	6.6	20.4	1.7	77.0	.355	.399	.045	.014	.008
Kentucky -----	7.7	17.3	1.6	59.9	.364	.415	.034	.016	.006
Louisiana -----	14.0	21.7	1.8	70.4	.370	.393	.031	.024	.009
Maine -----	5.0	15.4	1.9	63.4	.296	.464	.018	.020	.008
Maryland -----	13.1	19.2	1.8	74.1	.319	.479	.017	.010	.006
Massachusetts -----	8.2	20.8	1.7	75.9	.334	.399	.028	.014	.006
Michigan -----	8.3	22.6	1.5	85.9	.329	.408	.028	.012	.011
Minnesota -----	7.6	22.9	1.7	82.2	.357	.416	.014	.010	.008
Mississippi -----	6.7	15.8	1.7	54.8	.370	.481	.028	.028	.011
Missouri -----	15.3	24.5	1.8	82.6	.362	.451	.021	.010	.010
Montana -----	5.1	18.5	1.5	76.3	.333	.434	.018	.023	.008
Nebraska -----	9.8	27.0	2.1	64.6	.497	.396	.035	.038	.020
Nevada -----	10.2	25.4	1.4	86.8	.357	.373	.027	.014	.011
New Hampshire -----	8.1	19.5	2.4	71.1	.341	.454	.018	.008	.004
New Jersey -----	9.1	21.4	1.7	81.0	.333	.409	.029	.011	.007
New Mexico -----	7.8	18.5	1.7	60.6	.376	.509	.052	.028	.008
New York -----	17.7	17.6	1.3	63.9	.339	.397	.016	.009	.005
North Carolina -----	9.8	14.1	1.7	56.2	.297	.509	.047	.015	.006
North Dakota -----	7.1	16.7	1.6	69.6	.298	.474	.022	.014	.010
Ohio -----	10.1	23.1	1.7	76.3	.379	.403	.030	.010	.009
Oklahoma -----	9.3	17.9	1.7	62.0	.347	.419	.022	.025	.009
Oregon -----	6.7	24.4	1.4	92.8	.344	.400	.027	.010	.014
Pennsylvania -----	11.4	22.7	1.7	86.9	.338	.445	.026	.010	.008
Rhode Island -----	6.8	19.3	1.7	70.4	.355	.385	.023	.007	.008
South Carolina -----	23.1	22.1	2.1	45.2	.545	.284	.038	.017	.008
South Dakota -----	4.5	12.0	1.5	46.5	.322	.502	.016	.021	.008
Tennessee -----	13.6	19.4	1.7	71.8	.326	.464	.021	.014	.007
Texas -----	14.3	20.0	1.8	71.2	.340	.420	.018	.018	.011
Utah -----	9.7	20.3	1.8	75.9	.320	.470	.034	.015	.013
Vermont -----	5.1	16.0	1.9	55.3	.347	.491	.013	.020	.010
Virginia -----	10.9	17.9	1.7	60.4	.361	.409	.032	.015	.012
Washington -----	11.9	27.2	1.7	102.3	.361	.352	.023	.010	.009
West Virginia -----	9.6	21.2	1.9	55.4	.458	.343	.018	.015	.006
Wisconsin -----	7.5	20.1	1.6	67.4	.371	.407	.030	.012	.007
Wyoming -----	9.3	18.9	1.7	69.9	.341	.419	.027	.022	.018

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value-acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

Building construction:

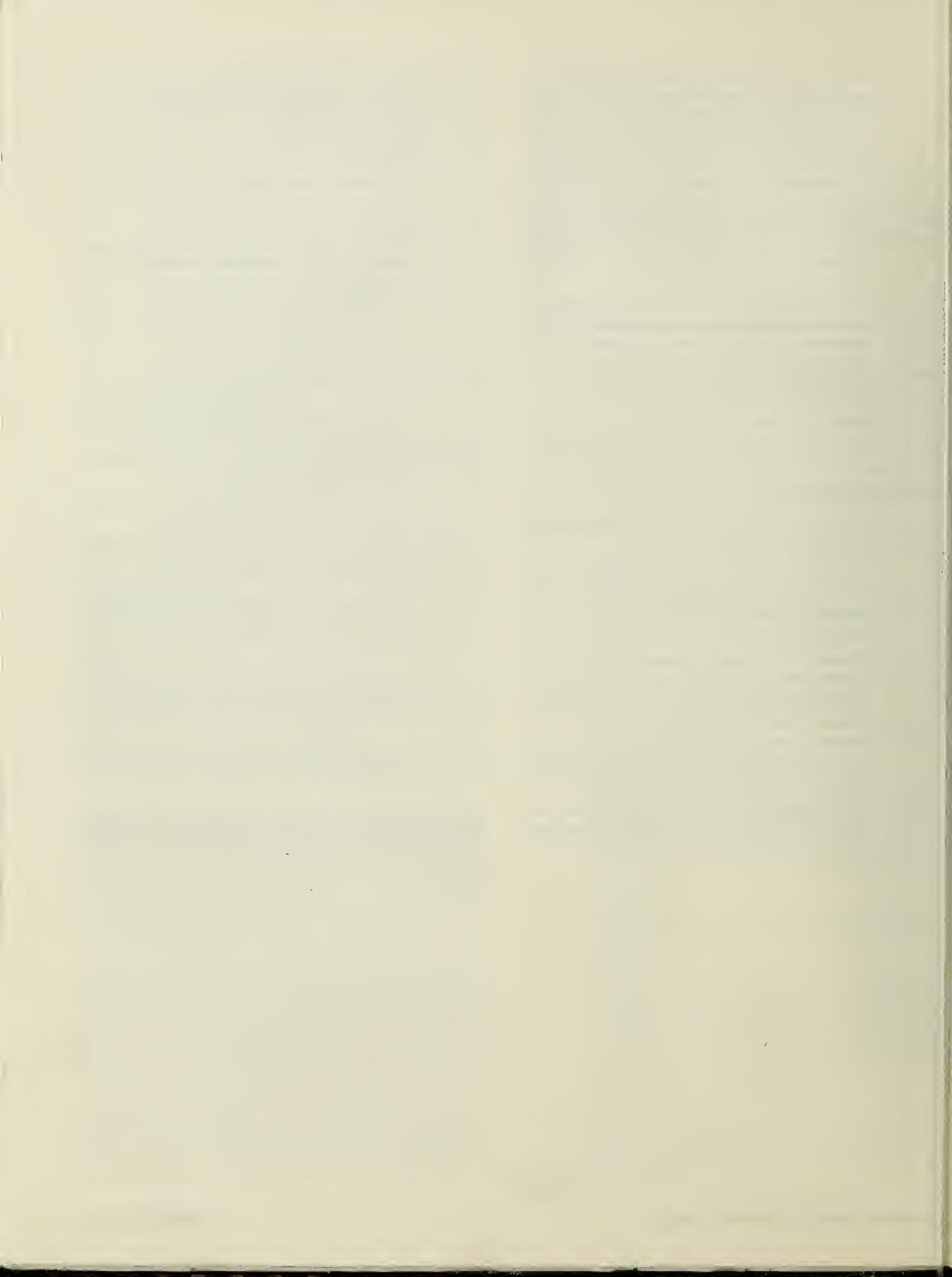
- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipplers and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.



APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family Houses	174	Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
16	CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS	1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
161	Highway and Street Construction, Except Elevated Highways	176	Roofing and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors	1761	Roofing and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting, Paper Hanging, and Decorating Special Trade Contractors	1794	Excavating and Foundation Work Special Trade Contractors
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		1799	Special Trade Contractors, N.E.C.
		6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington



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PUBLICATION PROGRAM

1982 CENSUS OF WHOLESALE TRADE

Publications of the 1982 Census of Wholesale Trade, containing data on wholesale trade establishments with payroll in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233. The first results were issued in preliminary reports. Final detailed statistics are issued in separate paperbound reports, which subsequently are assembled and reissued in clothbound volumes.

Final Reports

Geographic area series—52 reports (WC82-A-1 to -52)

A separate paperbound report is being published for each State, the District of Columbia, and the United States. Each report presents general statistics on number of establishments, sales, payroll, employment, operating expenses, and inventories, for all wholesale establishments. At the State level, data also are presented separately for the following types of wholesale operation: merchant wholesalers; manufacturers' sales branches and offices; and agents, brokers, and commission merchants. Less type-of-operation detail is shown below the State level. For States, SMSA's, counties, and places with 200 wholesale establishments or more, statistics are presented by kind of business. Greater kind-of-business detail is shown for larger areas. In addition, data are shown for all places with 2,500 inhabitants or more and all counties (with no kind-of-business detail). For each State, the District of Columbia, and the United States, 1982 data are provided on sales and employees per establishment, sales and payroll per employee, payroll as a percent of operating expenses, and operating expenses and end-of-year inventories as percentages of sales. Comparative statistics showing percent changes in sales and payroll between 1977 and 1982 also are shown.

Industry series—4 reports (WC82-I-1 to -4)

The first report (WC82-I-1) presents data based on size of establishment, size of company or firm (firm size is based on all establishments operated by a firm within the same kind of business or kind-of-business group for which data are presented), and legal form of organization. Establishment statistics are presented by sales size and by employment size; statistics for firms, by sales size (including concentration by largest firms), by employment size, and by number of establishments operated (single units and multiunits). Statistics are presented by kind of business on the number of establishments, sales, payroll, and employment for the United States.

A report (WC82-I-2) on measures of value produced, capital expenditures, depreciable assets, and operating expenses presents data for the United States by major kinds of business. Data also are provided on sales, purchases, and beginning and ending inventories. Measures of value produced include gross margin, value added, and net income produced at market prices and factor costs. Operating expenses include annual payroll, supplemental labor costs, purchased services, etc.

The commodity line sales report (WC82-I-3) presents data on major categories of commodities sold by wholesale kinds of business for the United States. Data for 15 selected SMSA's and 15 selected States will be issued on microfiche only. Tables present data for each kind of business, and show, for each commodity line, the number of establishments handling the line and their sales of the line; the percentage of total sales of the kind of business accounted for by each of the lines carried; and, for establishments actually handling a specific line, the percentage of their total sales represented by sales of that line. Summary statistics also are provided for the 129 broad commodity lines categories, including counts of establishments and the amount and percent of the line sold by various kinds of wholesale businesses.

A miscellaneous subjects report (WC82-I-4) contains data by kind of business on employment by principal activity, sales by class of customer, inventory valuation methods, commissions and gross selling value of business conducted for others by agents and brokers, and on petroleum bulk stations and terminals. Data are presented for the United States as a whole and, for petroleum bulk stations and terminals, for States and counties.

Final Report Volumes

- Volume I. Wholesale Trade—Summary and Industry Statistics. Includes data previously issued in series WC82-I.
- Volume II. Wholesale Trade—Geographic Area Statistics. Includes data previously issued in series WC82-A.

Microfiche

Every final report in the 1982 Census of Wholesale Trade will be available on microfiche.

Public-Use Computer Tapes

Selected data—generally detailed information by industry and/or geographic area—also are available on public-use computer tapes. For the selected data, these tapes will provide the same information found in the final reports. Public-use computer tapes are available for users who wish to summarize, rearrange, or process large amounts of data. These tapes, with corresponding technical documentation, are sold by Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, D. C. 20233.

OTHER ECONOMIC CENSUS REPORTS

Data on retail trade, service industries, construction industries, manufactures, mineral industries, transportation, enterprise statistics, minority-owned business enterprises, and women-owned businesses also are available from the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Marianas. Separate announcements describing these reports are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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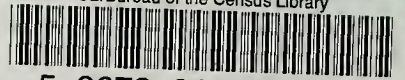


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